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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/569,586

03/29/2006

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EXAMINER

NGUYEN, XUAN LAN T

ART UNIT

PAPER NUMBER

3657

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/569,586	Applicant(s) MIYAZAWA ET AL.	
	Examiner Lan Nguyen	Art Unit 3657	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/23/06</u> . | 6) <input checked="" type="checkbox"/> Other: <u>JP translation</u> . |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 5 claims “a gas spring for applying a balancing rotary moment to the rotary shaft that at least partly cancels the rotary moment; a coupling arm that has the gas spring and is expandable and contractable via the gas spring”. These two claim features appear to be claiming the gas spring twice: as a gas spring and as a coupling arm. It is believed that Applicant intends to claim the features of figure 9 wherein the coupling arm comprises the gas spring 20B and an extension rod 56. However, claim 5 as presented does not particularly point out that the coupling arm comprises two separate elements. In fact, as presented, it recites only the gas spring resulting in claim 5 claiming the gas spring twice. As such, claim 5 is being treated as presented.

Claim Objections

3. Claim1-5 are objected to because of the following informalities:

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- Claim 1 recites one end of the gas spring and the other end of the gas spring. It is suggested to employ more distinguishable terms such as “first end and second end”.
- Claim 4, line 2, claims “the rotary shaft is a rotary shaft”. It is suggested to delete “a rotary shaft” to avoid any confusion of which rotary shaft is being claimed.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Mracek (US 4,081,654).

Re: claim 1, Mracek shows a rotary shaft balancer mechanism for reducing rotary moment acting on a rotary shaft 26 rotatably supported by a shaft supporting member 22 from one or more members supported by the rotary shaft, as in the present invention, comprising: a gas spring 56 for applying to the rotary shaft a balancing rotary moment that at least partly cancels the rotary moment; a first coupler 58 that rotatably couples one end of the gas spring to a stationary member 59 on the shaft supporting member 22; and a second coupler 64 that rotatably couples the other end of the gas

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spring to a rotary member 63 fixed to the end of the rotary shaft at a position offset to an axis of the rotary shaft, as shown in figure 1.

Re: claim 2, Mracek shows the axis of the rotary shaft 26, the rotary axis of the first coupler 56, and the rotary axis of the second coupler 64 are parallel.

Re: claim 3, Mracek, Mracek shows that the second coupler 64 is a hinge. It is inherent in a hinge to comprise a shaft to provide a rotary connection.

Re: claim 5, Mracek shows a rotary shaft balancer mechanism for reducing rotary moment acting on a rotary shaft 26 rotatably supported by a shaft supporting member 22 from one or more members supported by the rotary shaft, as in the present invention, comprising: a gas spring 56 for applying a balancing rotary moment to the rotary shaft that at least partly cancels the rotary moment; a coupling arm that has the gas spring 56 and is expandable and contractable via the gas spring as shown; a first coupler 58 that rotatably couples one end of the coupling arm to a stationary member 59 on the shaft supporting member 22; and a second coupler 64 that rotatably couples the other end of the coupling arm to a rotary member 63 fixed to the end of the rotary shaft at a position offset to the axis of the rotary shaft, as shown in figure 1.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mracek (US 4,081,654) in view of Saito (JP 2001-277059).

Mracek's balancer, as rejected above, shows the rotary shaft 26 is rotatably supporting a yoke 21 provided at a position offset to the axis of the rotary shaft 26. Mracek lacks a table unit in an indexer as claimed. Saito teaches a table unit 4 in an indexer 100 in figure 1 wherein in paragraph [0002], Saito teaches that pneumatic cylinder is commonly used as dead weight compensation mechanism. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed Mracek's balancer in an indexer of Saito to compensate for the weight and the gravity offset as shown by Mracek and as recognized by Saito.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Barnhart, Nakajima et al. and Schulte are cited for other uses of gas springs to compensate for weights with gravity offsets.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Nguyen whose telephone number is (571) 272-7121. The examiner can normally be reached on Monday through Friday, 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Xuan Lan Nguyen/
Primary Examiner
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